

# Industrial Wastewater Permitting

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# Types of Industrial Permits

- Construction
- Other Approvals
- NPDES
- Land Application



# When is a Construction Permit needed?

- New wastewater facilities
- Expansions of existing facilities
- Modifications to existing facilities
- Upgrades, if not equal to existing equipment
- Sewer line installation
- Recycle systems, evaporators
- See Reg. 61-67.100.C for exclusions

# Construction Permit Application

- Fill out the application form in its entirety
- Reg. 61-67 governs ww construction projects
- Engineering report should demonstrate limits can be met through pilot study data, similar plant information, vendor data, etc.
- SC PE must stamp all reports, calcs, specs and plans
- Plans and specs should include details on each piece of equipment including material of construction, size, location in treatment train, etc.
- Calculations shall be provided showing how equipment was sized/chosen



# Pretreatment Facilities

- First step is contacting the POTW to discuss your proposed changes
- Flow and ww characteristics are important
- Get pretreatment permit drafted before applying for construction permit
- If pretreatment permit not needed or unchanged, get letter from POTW for flow change

# Other Approvals

- Pump and haul
  - Reg. 61-67.300.G.2
  - Need approval in writing from DHEC for certain activities
- Pilot Studies
  - Generally for full-scale studies
  - If discharge will be potentially impacted, need written approval
  - Time frame will be specified to complete, generally no longer than a year
  - DHEC approval will require submission of results and construction permit application if permanent installation of wastewater system is needed



# Other Approvals

- Sludge disposal
  - Change in sludge disposal location(s)
  - Addition of sludge disposal location(s)
- Treatment system closure plan

# NPDES Permits

- Process wastewater discharges
- Cooling water/utility water discharges
- Sanitary wastewater discharges
- Storm water discharges



# NPDES Permit Applications

- Timeliness
  - For proposed discharges, Reg.61-9.122.21(c) says to submit at least 180 days before the discharge is proposed to begin
  - For existing discharges, Reg.61-9.122.21(d) says to submit 180 days before the permit expires
- Completeness
  - Reg. 61-9.122.21(e) says this is determined by the Department
  - Complete all applicable forms and supplements
  - Follow R. 61-9.122.21 for information requirements

# NPDES Permit Applications

- Tips for timeliness and completeness
  - Follow the instructions!!
  - Submit the application at least one month before the due date
  - Extensions are available, but limited
  - Computer-generated forms must match the originals



# NPDES Applications

- Forms
  - Form 1- basic info
  - 2C-Process ww
  - 2D-New sources
  - 2E-Cooling water, sanitary ww
  - 2F-Storm water
  - NOIs for General Permits

Forms available on DHEC's website at

<http://www.scdhec.gov/eqc/admin/html/eqforms.html#Water>

# Form 1 - The Basics

- Check boxes in the middle of the form direct you to which type of form to complete for discharge
- Facility name-what the site goes by
- Contact-person whom DHEC will deal with on permit issues
- SIC codes-make sure the primary SIC is the site's primary business; give up to 4 to describe the business
- Owner/operator
- Signature-must meet Reg.61-9.122.22



# NPDES Applications: The Details

- Note any changes since the permit was last issued
  - Was production increased or decreased?
  - Did any waste streams change?
  - Did you upgrade or expand your wwtp?
- Note whether you are changing anything for the future that could impact the permit requirements
- Note what items in the current permit you would like to be changed
  - Reduced sampling frequency
  - Removal of parameters currently being sampled

# NPDES Applications: The Details

- All sources of wastewater to an outfall must be provided
- Estimate or actual flow of each source must be provided
- Note any special studies or testing that have been conducted, whether the permit required them or not
- Is the discharge intermittent or continuous?
- Effluent data
  - PQL issues
  - Production information



# NPDES Applications: The Details

- Provide information on sludge disposal
  - If you land apply sludge and those requirements are included in the NPDES permit, include all the land app permit application details with the NPDES permit application
  - Include date of last report submitted to DHEC on land app activities
- Provide information on ground water monitoring
  - Provide the date this information was last submitted to DHEC

# NPDES General Permits

- Aquaculture/Concentrated Aquatic Animal Production
- Bulk Petroleum Storage Activities
- Hydrostatic Test Water Discharges
- Mineral Mining Activities
- Petroleum Contaminated GW Discharges
- Water Treatment Plant Discharges
- Vehicle Wash Water Discharges
- Utility Water Discharges
- Storm Water Discharges – Industrial Activity
- Storm Water Discharges – Construction Activity



# NPDES General Permits

- NOIs are different for each general permit
- Requirements are different and specific to the activity
- Permits are available on-line at <http://www.scdhec.gov/eqc/admin/html/eqgenpmt.html>
- NOIs are available on-line at <http://www.scdhec.gov/eqc/admin/html/eqforms.html#Water>

# Land Application (ND) Permits

- Land application of industrial sludge – includes both process and domestic generated sludges at industrial facilities
  - R.61-9.504 governs industrial sludge land application
- Application of wastewater via irrigation, infiltration, overland flow, tile field or percolation basin
  - R.61-9.505 governs wastewater land application



# ND Permit Application

- Complete the ND Permit Application Forms and supplements
- Signature must meet R.61-9.505.22
- Include a report that contains all the information in R.61-9.505.21(f) and (g), as appropriate
- Include any additional information that we need to permit this activity

# Important related items

- For permit modification requests, give us as much information as possible; may even need to meet full application requirements
- We cannot issue a construction permit for wastewater treatment facilities until the disposal permit (pretreatment, NPDES, ND) is issued without appeal



# Questions/Other Issues

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